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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,523

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Jean-Philippe Thomas

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EXAMINER

MONIKANG, GEORGE C

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,523	<b>Applicant(s)</b> THOMAS ET AL.	
	<b>Examiner</b> GEORGE C. MONIKANG	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/560,523.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/1/2008 has been entered.

### ***Claim Rejections - 35 USC § 112***

1. Claims 1, 6, 15 & 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The "receiver for receiving, via a dedicated connection distinct from said telecommunication network" limitation is not described in a manner to enable one of ordinary skill in the art to understand.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-8, 10-17 & 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al, US Patent 6,496,581, in view of Philipsson et al, US Patent 7,006,624 B1. (The Finn et al reference is cited in IDS filed 12/13/2005)

4. Re Claim 1, Finn et al discloses device for processing an echo between at least two local communication devices close to one another and coupled to each other by a communication network to attenuate (fig. 2: cell phone 1 & 2; col. 7, lines 40-58; col. 5, lines 62-65), in a signal picked up by at least one microphone of one of said at least two local communication devices (fig. 2: 36 & 38; col. 7, lines 40-58), the components of a signal broadcasted by at least one loudspeaker on at least one other of said at least two local communication devices (fig. 2: 32; col. 7, lines 28-40), the echo processing device being arranged for processing the signal picked up in one of said at least two local communication devices (fig. 2: 32; col. 7, lines 28-58) comprising: a receiver for receiving, via a dedicated connection distinct from said telecommunication network, from at least one other of said at least two local communication devices (fig. 2: 32; col. 7, lines 28-58), information representing at least one signal broadcast by at least one

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loudspeaker of at least one other of said at least two local communication devices (fig. 2: 32 & 34; col. 7, lines 28-40), a signal processing arrangement for modifying the signal picked up by at least one loudspeaker of at least one other of said at least two local communication devices from said information representing the broadcasted signal (col. 7, lines 28-58); but fails to disclose weighting the broadcasted signal by a coefficient representing the distance between a loudspeaker and a microphone as taught in Philipsson et al (Philipsson et al, col. 3, lines 19-29 & 32-42). It would have been obvious to modify the distance compensation method of Finn et al (Finn et al, para 0059) with weighting the broadcasted signal by a coefficient representing the distance between a loudspeaker and a microphone as taught in Philipsson et al (Philipsson et al, col. 3, lines 32-42) for the purpose of reducing or eliminating undesirable effects

5. Re Claim 2, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 1, wherein the communication device includes the echo processing device (Finn et al, col. 7, lines 28-58).

6. Re Claim 3, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 2, further including a controller for controlling echo between at least one of the loudspeakers and microphone (Philipsson et al, col. 3, lines 19-29 & 32-42).

7. Re Claim 4, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 1 wherein the information received representing at least one broadcasted signal from at least one other communication

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device was previously weighted by a coefficient representing the distance between a loudspeaker and the microphone (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

8. Re Claim 5, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 4, wherein the signal processing arrangement for modifying the picked up signal is arranged to modify the picked up signal according to the weighted broadcasted signal in the reference echo control signal (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

9. Claims 6, 8 & 17 have been analyzed and rejected according to claim 1.

10. Re Claim 7, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 6, wherein the echo processing device also comprises circuitry obtaining information representing the distance between at least one loudspeaker of the said at least one communication device and the microphone of the other communication device (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

11. Re Claim 10, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 6, wherein the circuitry is arranged for establishing the number of other communication devices and establishing the number of loudspeakers of the other communication devices (*Finn et al, col. 7, lines 28-58*).

12. Re Claim 11, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 10, wherein the echo processing device also comprises: a generator for generating at least one predetermined audible signal (*Finn et al, fig. 5: 218 & 258*), a receiver for receiving, by means of the connection with

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at least one other device, information representing the reception of the audible signal by at least one other device (*Finn et al, fig. 2: 32 & 34; col. 11, lines 48-67*), the signal processing arrangement being arranged for determining the distance between a loudspeaker of the said communication device and the microphone of at least one other communication device (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

13. Claims 12 & 21 have been analyzed and rejected according to claim 1.

14. Claim 13 has been analyzed and rejected according to claim 4.

15. Re Claim 14, the combined teachings of Finn et al and Philipsson et al disclose the echo processing method according to claim 13, wherein the picked up weighted signal is taken into account in a reference echo control signal of the communication device (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

16. Claims 15 & 22 have been analyzed and rejected according to claim 1.

1. Claim 16 has been analyzed and rejected according to claim 7.

2. Claim 19 has been analyzed and rejected according to claim 10.

17. Claim 20 has been analyzed and rejected according to claim 11.

Re Claim 23, the combined teachings of Finn et al and Philipsson disclose a system including a plurality of the devices of claim 1 wherein the dedicated connection is arranged for coupling a wave including the information and an electric component (*Finn et al, col. 7, lines 28-60*), and the local communication devices are close enough to each other that acoustic waves are coupled between the microphones and loudspeakers of the local communication devices (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

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Re Claim 24, the combined teachings of Finn et al and Philipsson et al disclose a system including a plurality of the devices of claim 6 wherein the dedicated connection is arranged for coupling a wave including the information and an electric component (*Finn et al, col. 7, lines 28-60*), and the local communication devices are close enough to each other that acoustic waves are coupled between the microphones and loudspeakers of the local communication devices (*Philipsson et al, col. 3, lines 19-29 & 32-42*).

Claim 25 has been analyzed and rejected according to claim 23.

Claim 26 has been analyzed and rejected according to claim 24.

18.

19. Claims 9 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al, US Patent 6,496,581 and Philipsson et al, US Patent 7,006,624 B1, as applied to claim 8 above, and further in view of Janse et al, US Patent Pub. 2003/0026437 A1.

20. Re Claim 9, the combined teachings of Finn et al and Philipsson et al disclose the echo processing device according to claim 8, but fails to disclose wherein the communication device comprises a plurality of loudspeakers coupled with the at least one communication device (*Janse et al, abstract*) so that (a) the signals reproduced by each loudspeaker of the least one communication device are weighted by respective coefficients representing the couplings between each loudspeaker of the communication device and the microphone of the other communication device (*Janse et*



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*al, abstract*) and (b) the weighted signals are added (*Janse et al, para 0030*). However, Janse et al does.

21. Taking the combined teachings of Finn et al, Philipsson et al and Janse et al as a whole, one skilled in the art would have found it obvious to modify the echo processing device according to Finn et al and Philipsson et al with wherein the communication device comprises a plurality of loudspeakers coupled with the at least one communication device (*Janse et al, abstract*) so that (a) the signals reproduced by each loudspeaker of the least one communication device are weighted by respective coefficients representing the couplings between each loudspeaker of the communication device and the microphone of the other communication device (*Janse et al, abstract*) and (b) the weighted signals are added (*Janse et al, para 0030*) as taught in Janse et al so a fine tuned model can effectively be made in cases wherein speakers move.

22. Claim 18 has been analyzed and rejected according to claim 9.

### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE C. MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C Monikang/  
Examiner, Art Unit 2614

1/26/2009

**/Vivian Chin/**  
**Supervisory Patent Examiner, Art Unit 2614**